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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/005,473	11/06/2001	Somchai Kreang-Arekul	021106-000510US	7213

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EXAMINER

CHOOBIN, BARRY

ART UNIT	PAPER NUMBER
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2623

DATE MAILED: 01/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/005,473	<b>Applicant(s)</b> KREANG-AREKUL ET AL.	
	<b>Examiner</b> Barry Choobin	<b>Art Unit</b> 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-39, 43, 44 and 54-68 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 54-58 and 62-66 is/are allowed.
- 6) ☒ Claim(s) 1-4, 13-15, 39, 43, 44, 59-61 and 67 is/are rejected.
- 7) ☒ Claim(s) 5-12, 16-38 and 68 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments, see Remarks, filed 10/24/2005, with respect to the rejection(s) of claim(s) 1-39, 43-44 and 54-68 under Double Patenting have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Michael, Wei et al and Xiong et al.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 39 are rejected under 35 U.S.C. 102(b) as being anticipated by Michael (US 5,640,200).

As to claims 1, 39, Michael discloses a method of aligning a plurality of images, the method comprising: providing a marker on a first image and a second image; overlapping the first image and the second image to match the marker on the first image with the marker on the second image (fig.4, column 6, lines 32-53); computing an absolute difference value between the pixel intensities of the overlapping portions of the first and second images to validate alignment between the first and

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second images (column 6, lines 32-52 wherein the method and apparatus employs the Sum of absolute differences metric equation).

As to claim 2, Michael discloses realigning at least one of the first image and second image if it is determined that the first and second images are misaligned (column 2, lines 23-34).

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claim 59-61 are rejected under 35 U.S.C. 102(e) as being anticipated by Xiong et al (US 2003/0179923).

As to claims 59, 60, Xiong et al disclose a stitched image comprising: a first portion comprising a first portion of a first image; a second portion comprising a first portion of a second image; and an overlap portion comprising a blended combination of a second portion of the first image and a second portion of the second image. (See paragraph 0045)

As to claim 61, DICOM DATA BASE is well know in the art of image processing system in particular in medical image processing.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3-4, 13, 14, 15, 43, 44, 67, rejected under 35 U.S.C. 103(a) as being unpatentable over Michael in view of Wei et al (US 2002/0044676).

Michael fails to disclose that the image is produced from a radiography device and further blending the overlap section of the images.

Wei et al disclose blending (combining) overlapped portion of the images (see fig.6); refer to fig. 2 for the displaying the overlapped section of the images.

Michael and Wei are combinable, because they both are in the same field of endeavor. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the work of Michael with Wei et al in order to provide a larger composed image.

Claim 67 is similarly analyzed and rejected.

***Allowable Subject Matter***

7. Claims 5-12, 16-38 and 68 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Claims 54-58, 62-66 are allowed.

**CONTACT INFORMATION**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barry Choobin whose telephone number is 571-272-7447. The examiner can normally be reached on M-F 7:30 AM to 18:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, WU JINGGE can be reached on 571-272-7429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Barry Choobin  
1/7/05